

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A LC-Display with n gate driver and source drivers for driving the LC-Display with dots arranged in x rows and y columns, wherein the gate drivers ~~comprises~~ comprise several output stages for driving the gate lines of the LC-Display, the LC-Display comprising:
 - a gate on supply line VH to turn on a transistor of the LC-Display;
 - a gate off supply line VL to turn off a transistor of the LC-Display, wherein the gate off supply line VL;
 - an additional gate off supply line VL_{clean} to substantially reduce a discharge time associated with driving transistors of the LC-Display, wherein the additional gate off supply line is coupled to the output stages of the gate drivers and is routed as a separate track from the gate off supply line VL; and
 - a circuit to connect a storage capacitance C_{st} of a selected gate line GL_y to the additional gate off supply line VL_{clean} and to keep other storage capacitors C_{st} of unselected gate lines connected to the gate off supply line VL.
2. (previously presented) The LC-Display as claimed in claim 1, wherein the output stage comprises:
 - a PMOS transistor MP1 arranged between the gate on supply line VH and an output of the output stage;
 - a first NMOS transistor MN1 arranged between the gate off supply line VL and the output of the output stage; and
 - a second NMOS transistor MN2 arranged between the additional gate off supply line VL_{clean} and the output of the output stage.

3. (previously presented) The LC-Display as claimed in claim 1, wherein the additional gate off supply line VLclean is routed over a separate track on the LC-Display glass.
4. (previously presented) The LC-Display as claimed in claim 1, wherein a track of the gate off supply line VL and a track of the additional supply line VLclean are coupled to a same supply level.
5. (previously presented) The LC-Display as claimed in claim 1, further comprising a power supply to supply a voltage to the gate off supply line VL and the additional gate off supply line VLclean, wherein a track of the gate off supply line VL and a track of the additional gate off supply line VLclean are connected together in a location where a track impedance to an output of the power supply is relatively low.
6. (previously presented) A method for driving a display with n gate drivers and at least one source driver, the method comprising:
 - arranging dots in x rows and y columns;
 - providing several output stages for driving gate lines of the display;
 - providing a gate on supply line VH to turn on a transistor of the LC-Display;
 - providing a gate off supply line VL to turn off a transistor of the LC-Display;
 - providing an additional gate off supply line VLclean to substantially reduce a discharge time associated with driving transistors of the LC-Display, wherein the additional gate off supply line is coupled to the output stages of the gate drivers and is routed as a separate track from the gate off supply line VL;
 - connecting a capacitance of a selected gate line to a previous gate line; and
 - activating an additional supply line VLclean of the output stage for the selected gate line with the supply line VL when the previous gate line is activated.

7. (previously presented) A method for driving a display with n gate drivers and a source driver, the method comprising:

- arranging dots in x rows and y columns;
- providing several output stages for driving gate lines of the display;
- providing a gate on supply line VH to turn on a transistor of the LC-Display;
- providing a gate off supply line VL to turn off a transistor of the LC-Display;
- providing an additional gate off supply line VLclean to substantially reduce a discharge time associated with driving transistors of the LC-Display, wherein the additional gate off supply line is coupled to the output stages of the gate drivers and is routed as a separate track from the gate off supply line VL;
- connecting a capacitance of a selected gate line to a next gate line; and
- activating an additional supply line VLclean of the output stage for the selected gate line with the supply line VL when the next gate line is activated.